

poration, No. 2 (Water Products). The nests are classified into four categories, the price fixed for each being as follows:-

- No. 1 — Kyats 800.00 per viss.
- No. 2 — Kyats 700.00 per viss.
- No. 3 — Kyats 550.00 per viss.
- No. 4 — Kyats 350.00 per viss.

Nests collected prior to 1971-72 under licence were as follows:-

- 1966-67 — 526 viss = 859694.4 gm
- 1967-68 — 338 viss = 552427.2 gm
- 1968-69 — 328 viss = 536083.2 gm
- 1969-70 — 289 viss = 472341.6 gm
- 1970-71 — 432 viss = 706060.8 gm
- 1 viss = 1634.4 gm
- 1 kyat = c. Rs. 1.35 (Indian currency as on 1974).

## 9. NOTES ON THE EGG TEETH OF THE HOUSE SWIFT

The egg tooth of birds is an integumentally derived tooth-like protuberance or horny tubercle usually found near the distal end of the upper mandible at the time of hatching. It is generally believed to function "in cutting through shell membranes and shell at hatching" (Clark 1961). A variety of supplementary tooth-like structures have been noted on the lower mandible; a single egg tooth restricted to the lower mandible has been reported for several families of birds.. In some groups of birds the egg tooth is decidedly deciduous and is quickly lost, while in others it gradually disappears without falling off. The presence, distribution and timing of egg teeth in birds have been reviewed by Clark (1961) and Parkes & Clark (1964). Even so, only fragmentary data exist for the order Apodiformes and this is confined to observations of a few swifts of the family Apodidae. We present here more detailed observations of the egg teeth of the House Swift, *Apus affinis*.

Observations were made of an aged series of preserved young as well as of numerous living nestlings of a wide variety of ages examined as part of a study of the post-hatching development of the House Swift. All of the nest sites were in the vicinity of Baroda, Gujarat, India. Newly hatched young House Swifts have what appears to be a typical egg tooth near the distal end of the dorsal surface of the upper mandible. It is whitish in colour and stands out against the mandible which becomes appreciably darker during the first week of post-hatching development. This egg tooth gradually becomes darker and less conspicuous until it finally disappears by the time the nestling is 13 or 14 days old. A second tooth-like structure is present on the lower mandible in the form of a hardened cap to the tip. This protruding structure is noticeably

paler than the adjacent portions of the lower mandible during the first days of nestling life. This cap gradually disappears but was still observable in a 16 day old nestling.

Previously (Parkes & Clark 1964), an egg tooth had been noted on the upper mandible of the Chimney Swift, *Chaetura pelagica*, and Pygmy Swiftlet, *Collocalia troglodytes*, both members of the subfamily Chaeturinae. Egg teeth on both upper and lower mandibles similar to those noted here were recorded by Collins (1968:293) for the Short-tailed Swift, *Chaetura brachyura*, and also for the Chestnutcollared Swift, *Cypseloides rutilus*, a representative of the subfamily Cypseloidinae. The only previous indication of egg teeth in the remaining subfamily Apodinae, of which the House Swift is a member, is the tooth-like rudiments noted in the study of the embryonic development of the Alpine Swift, *Apus melba* (Burckhardt 1954). The rate of disappearance of the egg teeth in *C. brachyura* and *C. rutilus* was similar to that noted here for *Apus affinis* in that they were usually not observable after the age of 14 days (Collins 1968:293). It now seems clear that the presence of a typical appearing egg tooth on the upper mandible and a hardened cap to the tip of the lower mandible is widespread in the Apodidae and probably is typical of all species of the family. These structures are clearly not deciduous and take about two weeks to disappear, at least in the small to medium sized swifts. Observations on some of the larger species in the family might be interesting in this respect. At present no data on the teeth have been presented for the Crested Swifts (Hemiprocnidae) or the Hummingbirds (Trochillidae). Such information on these two remaining families of the order would be interesting, particularly in the light of the recent revival of interest in the degree of relationship of these families (Burton 1971).

This study, part of a wider study of the biology and ecology of the House Swift, has been supported by a Fulbright Research Scholarship (to C.T.C.) and a research grant awarded (to R.M.N.) by the M. S. University of Baroda.

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10. ON THE VALIDITY OF *RIPARIA RIPARIA INDICA* TICEHURST AND EXTENSION OF RANGE OF *RIPARIA RIPARIA IJIMAE* (LONNBERG)

In 1916, Ticehurst (*Ibis*: 70) separated Collared Sand Martins *Riparia riparia* (Linnaeus) resident in the Punjab as *indica*, distinguishing them from *diluta* (Sharpe & Wyatt, type locality Tashkent) by their smaller size, shallower fork in tail and less distinct (sometimes absent) band across the breast. In the FAUNA, Stuart Baker accepted this subspecies but under the name *subsoccata* Adams treating *indica* as a synonym. There was some discussion regarding the validity of the name *subsoccata* but subsequent authors have dropped the subspecies considering it as synonymous with *diluta*.

While cataloguing the birds of the Bombay Natural History Society Collection, 11 specimens (16♂♂ 5♀♀ :- 1 Attock, 3 Campbellpur, 2 Rawalpindi, 2 Madhopur, Gurdaspur, Punjab; 1 Okhla, Delhi; 2 Manjhaul, Monghyr District, Bihar) could be separated from 8 others (5♂♂ 1♀ 2 o?:- 1 Kashgar, Chinese Turkestan; 2 Chitral, NWFP, 1 Jagadhri, Ambala, 1 Tara Devi 7000' Patiala, Punjab; 1 Khahi, Pithoro, Sind; 2 Nandur-Madhmeshwar, Nasik, Maharashtra) on the characters mentioned above. The former were collected between 14th December and 9th February and several of the specimens are marked as having enlarged gonads, or even shot off eggs, leaving little doubt that they represent a distinct form resident in Northern India over which area *diluta* was also found as a non-breeding visitor.

Nine more specimens (3♂♂ 2♀♀ 4 o?:- 2 Rham, 14700', Tibet, 1\* Nal, Ahmedabad, Gujarat, 1\* c. 15 m off Bassein, 1 Mahim, Bombay, 1 Thana District, Maharashtra; 2 Manjhaul, Monghyr District, Bihar, 1 Kaziranga, Assam) are now identified as *ijimae* (Lonnberg) for their darker upperparts and slightly longer tails. The identification of two marked \* has been confirmed by Mr. Gorman Bond at Smithsonian Institution.